SUMMARY

IMPACT OF CASE-COORDINATION AND CASE-MANAGEMENT ON GULF WAR VETERAN PATIENT SATISFACTION

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Study Introduction. Formal surveys of Gulf War veterans in VISN 8 suggest problems with patient satisfaction, patient education, and continuity of health care. To address these concerns, this study evaluated the effectiveness of two intervention strategies: 1. *Case-coordination* by a GS-7 clerk (a low-cost solution), and 2. Professional-level case management (a high cost solution). *Case management* means the coordination of care by an advance registered nurse practitioner, with emphasis on health promotion, patient education, appropriate referrals, and timely follow-up.

In the present study, investigators identified an "at-risk" group as the 15 to 25 percent of Gulf War veterans who remain dissatisfied with VHA health care or have undiagnosed illnesses following a Gulf War Registry examination. To help these veterans, investigators developed a unique residential rehabilitation program involving a one-week program that focuses on health promotion and symptom management through multiple modalities including physical therapy, kinesiotherapy, recreational therapy, stress management and relaxation, and vocational rehabilitation, if required.

Methods. Tampa's Demonstration Project adapted an existing veteran chronic pain rehabilitation program for use with Gulf War veterans. This meant shortening the program, and expanding it to address multiple symptoms including pain, fatigue, sleep disturbance, and impaired social and physical functioning. A key component of this Project was use of high customer service standards and development of several mechanisms for obtaining veteran input and feedback.

Six groups of Gulf War veterans were compared, including comparison groups of at-risk and low-risk Gulf War veterans from VISN 8 ("low-risk" veterans are satisfied with VHA care and do not have unexplained illnesses.) The six groups were compared on critical clinical (self-management, self-efficacy, fatigue, sleep, pain, anxiety, depression) and health services outcome measures (patient satisfaction, health status, health care utilization, and cost). This protocol allowed evaluation of the residential rehabilitation intervention, case management or case coordination interventions, and a combination of the two interventions.

Some months into this study, researchers determined that a one-year follow up was not possible. The protocol was changed to allow data collection at six months instead of one year. The shortened length of follow-up is methodologically more sound because of high mobility of this population and loss to follow-up. Furthermore, the residential rehabilitation program was changed from two to one week based on veteran feedback. The one-week program retained its focuses on health promotion and coping with symptoms through multiple modalities including physical therapy, kinesiotherapy, recreational therapy, stress management and relaxation, patient education, and vocational rehabilitation.

Results. Forty-four veterans completed the residential rehabilitation portion of the program. Veterans reported that they preferred this approach, and were very positive about: 1) the interdisciplinary aspect of the program, 2) learning to be in more control of their care, 3) the input from physical therapy and kinesiotherapy, 4) one-to-one consultation with the Clinical Coordinator (e.g. case manager), and 5) the camaraderie developed within groups. Moreover, veterans reported they appreciated being listened to, an increased trust in the VA system. No statistically significant differences were found for the SF-36V measures, the short-term clinical outcome measures, or the Veteran Administration Patient Satisfaction instrument. Unfortunately, because of small sample sizes, the effects of case management could not be adequately evaluated in this study.

Veterans were generally satisfied with VHA clinicians, although some expressed frustration with some providers who were seen as failing to acknowledge veterans' symptoms, and with some clerical staff who were perceived as being more concerned with rules and procedures that with customer service.

Conclusion.

- High-risk veterans report more health problems, are less satisfied with VA care, have poorer health, and lower levels of self-efficacy in managing their health when compared to low-risk veterans. In three areas, at-risk veterans engaged in more self-management.
- The at-risk respondents mean scores were statistically significantly higher than the low-risk respondents on three of the nine sub-scales of the Lorig self-management Scale: cognitive symptom management, use of community services for tangible needs, and use of community services for emotional support.
- High-risk patients could be effectively screened using a simple two item screening method.
- High-risk Gulf War veterans in the residential rehabilitation group showed improvements in (comparing baseline to 4-week data) :
    - Four areas of self-efficacy (obtaining information about their disease, managing their disease, managing symptoms, and managing shortness of breath).
    - One area of self management (mental stress management and relaxation)
- High-risk Gulf War veterans in the residential rehabilitation group at six months follow-up showed no statistically significant differences with SF-36V measures, the VHA Patient Satisfaction instrument, or short-term clinical outcome measures.
- High-risk Gulf War veterans in the residential rehabilitation group at six months follow-up showed higher levels of self-efficacy to manage their disease, and increased use of mental stress management and relaxation.
- This intervention does not achieve expected cost-savings benefit by the 9-month post-intervention quarterly period, based upon healthcare utilization data from VHA for the veterans in intervention versus control groups.

Exportability To Other VAMC's.

Fibromyalgia. An appreciation that many Gulf War veterans in this study could be formally diagnosed with fibromyalgia helped in the development of a more focused treatment protocol.

Women Veterans. Request by women Gulf War veterans for counseling in specific gynecological issues led to establishing a lecture/session from women's health program staff. This effort was well received.

Male Veterans. Male veterans and their spouses expressed concerns about sexual issues including dysfunction. Male veterans were screened for sexual problems and thorough sexual histories were taken when indicated. Patients were referred to urology service when indicated. For spouses, an outlet was provided to discuss sexual concerns: sometimes this was all spouses wanted.

Aging Patient Population. In response to the relatively greater age of some Gulf War patients compared to other veteran groups, this program developed a lecture series on aging issues. One goal was to educate patients that some symptoms are secondary to aging, and to help them to put some of their symptoms in context.

Duration of Care. Many potential Gulf War veteran participants were put off by the two-week stay requirement. In response, the program was condensed; much treatment was outside the clinic, requiring greater focus on case management and follow-up to assure appointment scheduling and adherence. The focus changed from "treatment" to "evaluation and recommendation." The conclusion was that a residential program is probably not the most effective method of delivering services to Gulf War veterans, and alternative outpatient models should be assessed.

Case Management. Case management provided health information and assistance in obtaining services, and assurance of continuity of care. Both Low and High Risk Gulf War veterans liked the tested case management approaches, although the former did not see it as essential.

Health Education Program Component. Veterans were very satisfied with the health education component of this program, stating that it helped them to manage their own symptoms more effectively. Thus, this approach could have significant impact at other VAMC's.

Interdisciplinary Rehabilitation Approach: This program generated a strong interdisciplinary rehabilitation team with expertise working with Gulf War veterans who have chronic unexplained symptoms. Veterans had positive reactions to the interdisciplinary perspective of the program.

Needs Assessment. Needs assessment techniques coupled with ongoing input from Gulf War veteran participants was invaluable for program planning. Veteran input indicated that they experienced low levels of support from employers and families, and they had prevailing negative feelings and distrust of the VA, Department of Defense, and of the government. However, participants responded positively to health education, support strategies, and attention to pain management.

The full Tampa Demonstration Project Report is available on-line. For additional information, contact Dr.Gail Powell-Cope James A. Haley Veterans' Hospital, 13000 Bruce B. Downs Blvd., Tampa, FL 33612.